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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,543	12/01/2000	David Yach	555255012129	4943

7590 09/07/2006
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EXAMINER

STRANGE, AARON N

ART UNIT PAPER NUMBER

2153

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/728,543	YACH, DAVID	
	Examiner	Art Unit	
	Aaron Strange	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on 6/9/06, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

Response to Arguments

2. Applicant's arguments with respect to the rejection of claims 44-52, 55-47, 58-61, 64-70, 73 and 74 as being anticipated by Lowery have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments filed 6/9/06 with regard to the rejection of claims 44-46, 48-52, 55-57, 58-61, 64-70, 73 and 74 under 35 USC 102(e) as being anticipated by Schwartz et al. (US 6,473,609) have been considered but they are not persuasive.

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4. Regarding claims 44-46, 48-52, 55-57, 58-61, 64-70, 73 and 74, Applicant generally asserts that Schwartz fails to disclose converting page-rendered code into programmatic executable code. The Examiner respectfully disagrees for at least the reasons presented in the Office Action of 9/15/05 (at least ¶4).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 44-46, 48-52, 55-57, 58-61, 64-70,73, and 74 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwartz et al. (US 6,473,609).**

7. With regard to claim 44, Schwartz discloses a method of browsing content maintained in a page-rendered language without the use of a page-rendering browser application on a mobile communication device, comprising:

generating a request for content at the mobile communication device (Fig 1, 106) and transmitting the request to a gateway (Fig 1, 114) coupling the mobile

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communication device to a data network (Fig 1, 100) (requests for content are sent via gateway)(Col 5, Lines 57-61);

forwarding the content request from the gateway to a server on the data network where the content is stored in the page-rendered language (network server stores files in various page-rendered languages) (Col 8, Lines 58-67);

returning the requested page-rendered content from the server to the gateway (link server receives messages from network server)(Col 8, Lines 48-52);

translating the page-rendered content into a programmatic language and generating a corresponding executable program at the gateway (page is translated into screen commands which are placed in a SDD binary)(Col 9, Lines 27-47 and Col 10, Lines 3-8); and

forwarding the executable program to the mobile communication device which executes the program in order to browse the requested content (Col 10, Lines 3-8).

8. With regard to claim 46, Schwartz further discloses providing a byte code generator at the gateway; and executing the byte code generator to compress the translated programmatic language into byte codes (screen commands are compressed into byte codes) (Col 9, lines 39-47).

9. With regard to claim 48, Schwartz further discloses that the page-rendered language is HTML, HDML, XML or WML (Col 8, Lines 62-67).

10. With regard to claim 49, Schwartz further discloses that the page-rendered content returned from the server to the gateway is one of a plurality of content types, the method further comprising:

providing a plurality of content translators at the gateway, each of the plurality of content translators translating page-rendered content of a particular content type into a common type of programmatic language (several different types can be converted) (Col 8, Lines 62-67);

determining the content type of the page-rendered content returned from the server to the gateway (Col 9, Lines 1-4); and

selecting and executing one of the plurality of content translators (HDML translator) at the gateway in correspondence with the determined type of content in order to translate the page-rendered content into the programmatic language (message is analyzed and converted)(Col 9, Lines 31-36).

11. With regard to claim 50, Schwartz further discloses that the mobile communication device is coupled to the gateway via a wireless data network (Fig 1, 102).

12. With regard to claim 51, Schwartz further discloses that the programmatic language is a virtual machine language (SDD screen command), the method further comprising:

providing a virtual machine (interface engine) at the mobile communication device for executing programs coded in the virtual machine language (Col 10, Lines 3-8).

13. With regard to claim 52, Schwartz further discloses providing a file explorer at the mobile communication device (Col 9, Lines 1-5), the file explorer generating the request for content and storing the executable program forwarded from the gateway (Col 10, Lines 3-17).

14. Claims 55-57 and 58-61 are rejected under the same rationale as claims 44-46 and 48-52, respectively, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

15. Claims 64,67,68,66, and 69 are rejected under the same rationale as claims 44,45,46,48, and 51, respectively, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

16. Claim 65 is rejected under the same rationale as claims 44, 51, and 52, since claim 65 is substantially the combination of those claims. Any differences between the

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claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

17. Claim 70 is rejected under the same rationale as claim 51, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

18. Claim 73 is rejected under the same rationale as claim 44, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims all of the limitations are taught by the above cited art.

19. Claim 74 is rejected under the same rationale as claims 44,48, and 51 since claim 74 is substantially the combination of those claims. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 44-52, 55-57, 58-61, 64-70,73, and 74 are rejected under 35

U.S.C. 102(e) as anticipated by Lowery (US 6,446,111) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lowery (US 6,446,111) in view of Schwartz et al. (US 6,473,609).

22. With regard to claim 44, Lowery discloses a method of browsing content maintained in a page-rendered language (web pages are requested) (Col 7, Lines 17-24 and claim 16) without the use of a page-rendering browser application on a mobile communication device, comprising:

generating a request for content at the mobile communication device (Fig 1, 12), transmitting the request to a gateway (Fig 1, 18) coupling the mobile communication device to a data network (Fig 1, 14) (requests for content are sent to the gateway)(Col 9, Lines 3-5);

forwarding the content request from the gateway to a server (Fig 1, 22-24) on the data network;

returning the requested content from the server to the gateway (gateway collects the requested data from the sources)(Col 9, Lines 29-30);

translating the content into a programmatic language and generating a corresponding executable program at the gateway (content is translated into an applet)(Col 15, Lines 24-32); and

forwarding the executable program to the mobile communication device which executes the program in order to browse the requested content (Col 16, Lines 20-22).

Lowery fails to specifically recite that the content is stored at the server in a page-rendered language such as HTML. As an initial matter, it should be noted that it is almost certainly true that at least some of the content requested from the servers is stored in page-rendered language. Lowery clearly discloses that the client is requesting web pages (at least Col 9, Lines 15-17 and claims 16, 24 and 20), and it is well-known in the art that all conventional web pages contain content in a page-rendered language such as HTML. However, even if we could reasonably assume that Lowery does not at least implicitly disclose retrieving content from servers storing the content in a page-rendered language, such a modification of Lowery would have been obvious to one of ordinary skill in the art, as evidenced by Schwartz.

Schwartz discloses a similar system for converting requested content into a format that can be utilized by a mobile device. Schwartz teaches receiving a request for content at a gateway (Col 5, Lines 57-61), and forwarding the request to a server storing the requested content in a page-rendered language (HTML, HDML, WML, etc) (Col 8, Lines 58-67), and converting the requested content into a format usable by the mobile client (Col 9, Lines 27-47 and Col 10, Lines 3-8). This would have been an advantageous addition to the system disclosed by Lowery, since it would have allowed the user to request conventional web page stored in a page-rendered language without the use of a web browser (Schwartz, Col 6, Lines 51-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the client to request content that is stored in a page-rendered language by at least one server, translate the page-rendered content

into a programmatic language and generating a corresponding executable so that the client may access the content without the use of a convention web browser.

23. With regard to claims 45 and 46, Lowery further discloses a byte code generator configured to compress the translated programmatic language into byte codes. The use of a byte code generator is necessary in the generation of an applet, since the byte code is needed by the virtual machine in order to execute the applet.

24. With regard to claim 47, Lowery further discloses that the request for content is a URL (Col 4, Lines 15-22) request which is transmitted to the gateway using HTTP (Col 9, Lines 10-15).

25. With regard to claim 48, Lowery further discloses that the page-rendered language is HTML, HDML, XML, or WML (Col 7, Lines 22-24).

26. With regard to claim 49, Lowery further discloses that the page-rendered content returned from the server to the gateway is one of a plurality of content types, the method further comprising:

providing a plurality of content translators at the gateway, each of the plurality of content translators translating page-rendered content of a particular content type into a common type of programmatic language

determining the content type of the page-rendered content returned from the server to the gateway; and
selecting and executing one of the plurality of content translators at the gateway in correspondence with the determined type of content in order to translate the page-rendered content into the programmatic language.

Lowery discloses that the client requests information from data sources which provide various data and content information which may be either static or dynamic (Col 9, Lines 5-7). It is clear that multiple content translators must be present in the translation component in order to handle different data types that the client may request.

27. With regard to claim 50, Lowery further discloses that the mobile communication device is coupled to the gateway via a wireless data network (Col 8, Lines 47-50).

28. With regard to claim 51, Lowery further discloses that the programmatic language is a virtual machine language (Java) (Col 8, Lines 4-8), the method further comprising:

providing a virtual machine (JVM) at the mobile communication device for executing programs coded in the virtual machine language (Col 6, Lines 35-38).

29. With regard to claim 52, Lowery further discloses providing a file explorer at the mobile communication device, the file explorer generating the request for content (Col

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8, Lines 26-29) and storing the executable program forwarded from the gateway (applet is stored until it is no longer needed)(Col 12, Lines 44-39-51).

30. Claims 55-57 and 58-61 are rejected under the same rationale as claims 44-46 and 48-52, respectively, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

31. Claims 64,67,68,66, and 69 are rejected under the same rationale as claims 44,45,46,48, and 51, respectively, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

32. Claim 65 is rejected under the same rationale as claims 44, 51, and 52, since claim 65 is substantially the combination of those claims. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

33. Claim 70 is rejected under the same rationale as claim 51, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

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34. Claim 73 is rejected under the same rationale as claim 44, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims all of the limitations are taught by the above cited art.

35. Claim 74 is rejected under the same rationale as claims 44,48, and 51 since claim 74 is substantially the combination of those claims. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

36. **Claim 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al. (US 6,473,609).**

37. With regard to claim 47, while the system disclosed by Schwartz shows substantial features of the claimed invention (discussed above), it fails to disclose that the request for content is a Uniform Resource Locator request which is transmitted to the gateway using the Hypertext Transfer Protocol.

Schwartz discloses that the preferred communication is HDTP, but also states that "The present invention is, however, not limited by the exemplary communication protocol" (Col 7, Lines 29-32). Schwartz further discloses that the landnet uses HTTP, and that HDTP is converted into HTTP when transferred over the landnet (Col 7, Lines 15-16 and 52-55). It would have been advantageous to use HTTP on the wireless

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network, since it would have eliminated the need for conversion between the protocols, resulting in faster communication between devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use HTTP on the wireless network to transmit the requests from the wireless devices to the gateway so that they do not have to be converted between protocols.

38. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al. (US 6,473,609) in view of McGarvey (US 5,926,631).

39. With regard to claim 53, while the system disclosed by Schwartz shows substantial features of the claimed invention (discussed above), it fails to disclose generating a second request for content, determining if an executable program representing the requested content is stored at the mobile communication device, executing the program if it is present, and transmitting the second request for content to the gateway if it is not present.

McGarvey teaches the use of a Java code cache to store virtual machine language programs on a client. If a program is desired, the program loader checks the cache to see if the program is located there. If the program is not stored at the client, a request is made of the server for the program (McGarvey Col 9, Lines 18-32). This speeds up acquisition of the program and reduces network traffic if the program is found at the client.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a program store as disclosed by McGarvey to cache virtual machine language and only request programs which are not already stored at the client in order to speed up the acquisition of the program and decrease network traffic.

40. Claim 54 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Lowery (US 6,446,111) in view of Schwartz et al. (US 6,473,609) in further view of McGarvey (US 5,926,631), for the same reasons as discussed above.

41. **Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al. (US 6,473,609) in view of Gosling (US 5,630,066).**

42. With regard to claim 54, while the system disclosed by Schwartz shows substantial features of the claimed invention (discussed above), it fails to disclose verifying the executable program at the mobile communication device prior to executing the program.

Gosling teaches the use of a bytecode program verifier for verifying bytecode programs received from remote computer nodes. The verification process will help prevent undesirable occurrences such as underflow/overflow of the operand stack or attempts to process incorrect data types (Gosling Col 3, Lines 3-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a verification component as disclosed by Gosling in order to verify virtual machine language programs to prevent the software from failing by processing incorrect data types or going over the bound of the operand stack.

43. Claim 54 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Lowery (US 6,446,111) in view of Schwartz et al. (US 6,473,609) in further view of Gosling (US 5,630,066), for the same reasons as discussed above.

44. Claims 62 and 71 are rejected under the same rationale as claim 53, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

45. Claim 63 is rejected under the same rationale as claim 54, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

Conclusion

46. Applicant's amendment filed 6/29/2005 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

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See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

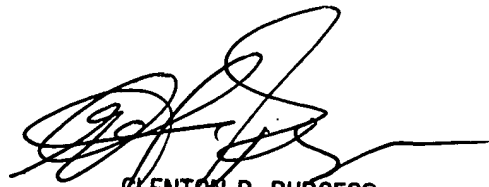
47. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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